

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference MEKTRON 2	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB 00/ 00950	International filing date (day/month/year) 20/03/2000	Priority date (day/month/year) 18/03/1999
International Patent Classification (IPC) or national classification and IPC H02B1/30		
Applicant MEKTRON SYSTEMS LIMITED et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



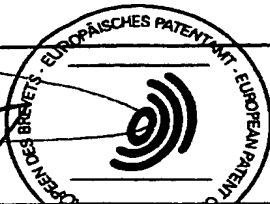
2. This REPORT consists of a total of 7 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consists of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☒ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 16/10/2000	Date of completion of this report 20. 12. 00
Name and mailing address of the IPEA/  European Patent Office D-80298 Munich Tel. (+49-89) 2399-0, Tx: 523656 epmu d Fax: (+49-89) 2399-4465	Authorized officer  P. Le Guay 

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

I. Basis of the report

1. This report has been drawn up on the basis of *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*

☒ the international application as originally filed

☐ the description, pages , as originally filed
 pages , filed with the demand
 pages , filed with the letter of

☐ the claims, Nos. , as originally filed
 Nos. , as amended under Article 19
 Nos. , filed with the demand
 Nos. , filed with the letter of

☐ the drawings, sheets / fig. , as originally filed
 sheets / fig. , filed with the demand
 sheets / fig. , filed with the letter of

2. The amendments have resulted in the cancellation of:

☐ the description, pages:
☐ the claims, Nos.
☐ the drawings, sheets / fig.

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2 (c)).

4. Additional observations, if necessary:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT**IV. Lack of unity of invention**

1. In response to the invitation (Form PCT/IPEA/405) to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.
- ☐ paid additional fees.
- ☐ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.

2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.
- ☒ not complied with for the following reasons:

1. The separate inventions/groups of invention are:

- (a) a conduction-cooled hardware enclosure comprising elements formed by casting and machining and the corresponding method of producing thereof (claims 1 to 9 and 19 to 20);
- (b) a conduction-cooled hardware enclosure comprising elements including a projection portion of a defined length (claims 10 to 16);
- (c) a conductive-cooled hardware enclosure comprising elements including projection portions and fixing means said fixing means comprising dowels (claims 17 and 18);
- (d) a method of producing a conduction-cooled hardware enclosure wherein pieces of different sizes are assembled together to form enclosures of the desired size (claims 21 and 22).

2. They are not so linked as to form a single general inventive concept (Rule 13.1 PCT) for the following reasons:

There is no common inventive subject-matter between the four groups of claims.

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☒ all parts.
- ☐ the parts relating to claims Nos.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty	Claims	1-22	YES
	Claims	None	NO
Inventive Step	Claims	1-20	YES
	Claims	21, 22	NO
Industrial Applicability	Claims	1-22	YES
	Claims	None	NO

2. Citations and Explanations

1. Concerning claims 1 to 9:

- (a) claim 1 relates to a conduction-cooled hardware enclosure comprising elements having projecting portion, said elements being assembled through fixing means;
- (b) nearest prior art is document US-A-4 691 970 which discloses such an enclosure and upon which claim 1 has been delimited;
- (c) the claimed enclosure discloses elements which are formed by casting and machining;
- (d) such a feature appears to be new with respect to the known prior art. It also enables to produce an enclosure which is stronger than the usual one. Therefore claim 1 satisfies the requirements of Article 33(2) and (3) PCT;
- (e) claims 2 to 9 are dependent claims which disclose particular embodiments of the invention - they are to be considered as novel and inventive as well.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT**2. Concerning claims 19 and 20:**

These claims disclose a method corresponding to the enclosure of claim 1. Therefore claims 19 and 20 have to be considered as novel and inventive Article 33(2) and (3) PCT.

3. Concerning claims 10 to 18:

- See part IV of this report
- Concerning more particularly the compliance of these claims with Article 33(2) and (3) PCT, it appears that both independent claims 10 and 17 recite the same preamble as claim 1 and therefore relate to the same prior art. Moreover claim 10 discloses a dimensional relation of the projecting portion which is not clear (see part VIII of this report) but once clarified could be considered as novel and inventive with respect to the known prior art. Claim 17 discloses a fixing means which also appears to be novel and relates to patentable subject-matter.

4. Concerning claims 21 and 22:

The teaching of these claims appears to be obvious with respect to the documents cited in the search report.

5. The industrial applicability of the enclosure and corresponding method of claims 1 to 22 is obvious.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

1. According to the requirements of Rule 11.13(m) PCT the same feature shall be denoted by the same reference sign throughout the application. This requirement is not met in view of the use of 1 which corresponds to a chassis (page 4, line 9) in the description and to an enclosure in the set of claims (for instance claim 1, line 1).

INTERNATIONAL PRELIMINARY EXAMINATION REPORT**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. Claim 1 relates to a device. However, its single characterising feature appears to be a manufacturing step. Therefore claim 1 should be reformulated as a method claim.
2. Claim 10 is characterised by the length of the projecting portion, this length being defined with reference to its thickness and to the spacing between the first and the second sides. However neither of these values have been defined in the preamble of claim 10. Therefore claim 10 lacks clarity in terms of Article 6 PCT.
3. In claim 19, lines 1 and 2, "an enclosure for conduction-cooled hardware" should read:

"a conduction-cooled hardware enclosure"

- for consistency reasons with the other claim of the set of claims
- to prevent that any document disclosing a box as claimed and which could be suitable for containing any hardware be novelty destroying for claim 19.